

V-Twin Mfg.
Forward Control Kit
For use on 1991-2003 XL Models
VT No. 22-0396

This is a custom application and rider safety depends on proper installation. This product should only be installed by a knowledgeable and trained motorcycle technician. V-Twin Mfg. accepts no responsibility for improper installation.

Installation Instructions:

Left Side

1. Block motorcycle securely into position for easy access to hardware relative to this position.
2. Remove exhaust pipes and mufflers and set aside.
3. Assemble shift lever support (1) by installing both 5/16 bushing (2) and grease fitting (47). Slide shift lever shaft (3) into support and secure with washer (5), lock washer (6), bolt (7).
4. Undo left front motor bolts from frame and remove case that cinches lower portion of mount to engine, upper case not needed to be touched.
5. Using case bolt (11) and flat washer (10), on front side and spacer (17), behind support in lower frame mounting position, install flat washer (10) and lock washer (19) and existing nut. Place clutch cable clamp if one is present on front side over end of hex blot (28) and thread on left foot peg mount (27), until snug.
6. Install foot peg (29), onto left foot peg mount (27) using hex bolt (31) and lock nut (30) and after proper positioning, tighten all hardware mentioned in Step 5 securely.
7. Remove original shift lever foot peg and foot peg mount. Replace foot peg mount bolts with shorter socket head screw (49). Slide transmission lever (25) onto splined shaft with lower hole directly below splines. Tighten lever to spline using bolt (45) and lock washer.
8. Assemble shift rod (13) using clevis (12) and nut (47) on one end and rod end (22) and nut (47) on other end. Do not tighten nuts yet and leave about 1/4" of thread showing on each end.
9. Using shoulder bolt and nut (23), install shift rod onto shift lever shaft lower ear and by using clevis pin (16), washer (15) and cotter pin (14) assemble other end of shift rod onto adapter lever (25).
10. Shift lever (8) can now be installed onto shaft (3) and after proper positioning, allowing full up and down movement, it can be secured using bolt (20) and locknut (21). Clevis and rod end locknut's (47) can now be cinched tight. Left side of motorcycle is now completed.

Rights Side

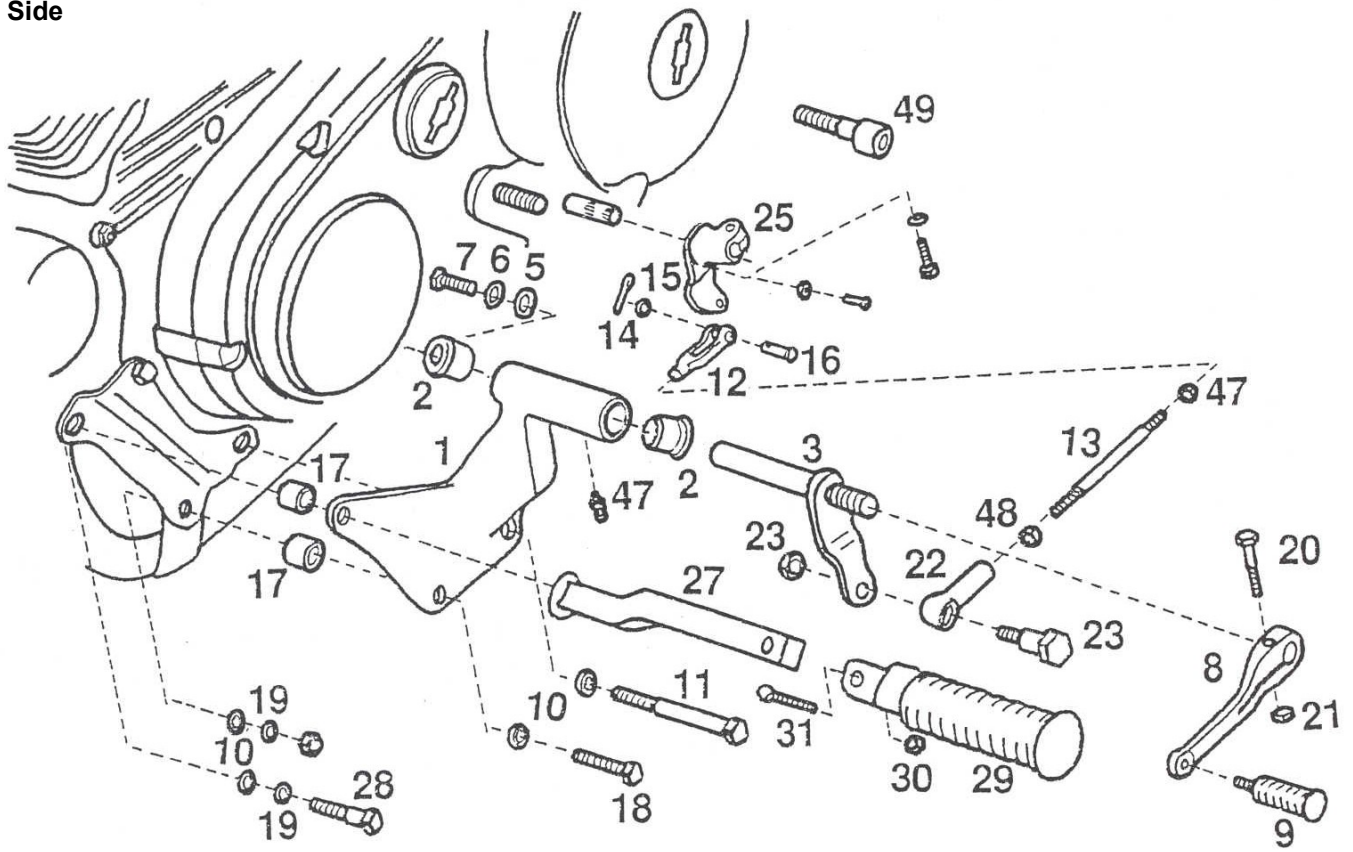
1. Remove two bolts, brake line clip and clevis pin securing master cylinder to sprocket cover. Master cylinder can now be swung clear and sprocket cover removed, Loosen nut from peg mount remove peg, mount and brake lever.
2. Insert spacer (24) and boll (44) through sprocket cover install bell crank (41) as per illustration, using special nut (43) and bushing (42). Tighten securely and reinstall sprocket cover and master cylinder. Connect bell crank to master cylinder using Clevis pin (16), washer (15) and cutter pin (14).
3. Remove right side motor mount bolts just the two that connect to the frame and install brake bracket (32), using two bolts (4) and (37), two spacers (36) and one lock washer (19) and acorn nut (38) on lower bolt and right side foot peg mount (39) on upper bolt. Assemble foot peg (29) to mount (39) with bolt (31) and locknut (30). Position foot peg properly and tighten entire assembly.
4. Install bushings (2) and grease fittings (46) into brake lever onto bracket shaft (32). Cinch with special flatwasher (34), lock washer (48) and acorn nut (35).
5. Assemble brake rod (40) with clevises (12) and nuts (47) on both ends so that about 1/2" thread is still visible. Using clevis pins (16), flat washers (15) and cotter pins (14), connect pins (14), connect brake lever (33) and bell crank (41) with assembled brake rod that has short end facing towards front of bike. Test pedal action and clearance to cam cover and if proper, cinch nuts (47) securely.
6. Reinstall exhaust pipes.

Note: Motorcycle should be test ridden at slow speed to make sure it is operating correctly. Use Loctite on first three threads of threaded hardware before final assembly.

Kit Breakdown

Item #	Qty	Description	Item #	Qty	Description	Item #	Qty	Description
1	1	Shift lever support	18	1	Hex Bolt 3/8-24x2	35	1	Acorn Nut
2	4	Bushing	19	5	3/8 Lock washer	36	1	Spacer Long
3	1	Shift lever shaft	20	1	Hex Bolt 5/16-24 x 1 1/4	37	1	Hex Bolt 3/8-24 x 2 1/2
4	1	Hex bolt 3/8-24x 2//34"	21	1	Nylon Lock Nut 5/16-24	38	1	Acorn nut 3/8
5	3	5/16 Flat washer	22	1	Rod End	39	1	Foot peg Mount Right
6	1	5/16 Lock washer	23	1	Shoulder Bolt and Nut	40	1	Brake Rod
7	1	Hex bolt 5/16-18x3/4"	24	1	Spacer	41	1	Bell Crank
8	1	Shift lever	25	1	Adapter Shift Lever	42	1	Bushing
9	1	Shift lever pedal	26	1	¼ Lock washer	43	1	Special
10	6	3/8 Flat washer	27	1	Foot peg Mount Left	44	1	Hex bolt 1/2-13 x 1 1/2
11	1	Hex Bolt 3/8-24 x 5 1/2	28	1	Hex Bolt 3/8-24 x 1 3/4	45	1	Hex Bolt 1/4-20 x 1
12	3	Clevis	29	2	Foot peg	46	2	Grease fitting
13	1	Shift Rod	30	2	Nylon Lock Nut 1/4-20	47	4	Hex Jam Nut 5/16-24
14	4	1/16" Diameter Cotter Pin	31	2	Hex Bolt 1/4-20 x 1 1/4	48	1	½" Lock washer
15	4	¼ Flat washer	32	1	Brake Mounting Bracket	49	2	5/16-18x2 ¾ Allen bolt
16	4	Clevis Pin	33	1	Brake Pedal			
17	2	Spacer Short	34	1	Flat washer (special)			

Shift Side



Brake Side

